

P26871.A04



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of

Docket No.: P26871

W. BLACKWELL, *et al.*

Confirmation No.: 9978

Serial No.: 10/602,711

Group Art Unit: No. 3652

Filed: June 25, 2003

Examiner: G. W. Adams

For: **METHOD AND APPARATUS TO EFFECTUATE AUTOMATED POSITIONING
AND LOADING OF VARIABLE SIZED CONTAINERS**

REQUEST FOR PRE-APPEAL BRIEF REVIEW

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Window, Mail Stop AF
Randolph Building
401 Dulany Street
Alexandria, VA 22314
Sir:

This request is being filed concurrently with a Notice of Appeal and is responsive to the Final Official Action of August 16, 2005.

Reconsideration and withdrawal of the 35 U.S.C. § 112, second paragraph, rejection, the 35 U.S.C. § 102(b) rejection, and the 35 U.S.C. § 103(a) rejection is respectfully requested in view of the following remarks.

A prima facie case of Indefiniteness has not been set forth and the Rejection Under 35 U.S.C. § 112, second paragraph, Is Improper

A prima facie case of anticipation has not been set forth and the Rejection Under 35 U.S.C. § 102(b) Is Improper

A prima facie case of unpatentability has not been set forth and the Rejection Under 35 U.S.C. § 103(a) Is Improper

Examiner's Assertion

The Examiner asserts that claims 1, 17, 21, 25 and 26 are indefinite because it is not clear what type of sensor is being claimed.

Applicants' Response

Applicants submit that the claims in fact clearly recite the type of sensor disclosed in the instant application and that one having ordinary skill in the art would understand the claimed invention. For example, claim 1 recites "at least one sensor which detects whether the bucket assembly has reached a fill capacity at each of" the three recited positions. Sensors performing this function are clearly shown in Fig. 1 as, e.g., reference numbers 120A-120C. As the Examiner will note, these sensors are arranged on the bucket assembly. Moreover, page 7, lines 4-16 of the specification clearly describes sensors 120A-120C as fill capacity sensors for a bucket assembly or a container arranged within the bucket assembly. Moreover, page 7, line 24 to page 8, line 9 of the specification clearly describes sensors 120D and 120E as sensors which detect the position of the bucket assembly or container arranged in the bucket assembly. Claim 17 recites similar features. With regard to claim 21, Applicants note that this claim recites the detecting of when a container is full in both a first tilt position and an intermediate position. As explained above, the sensors participating in this function are clearly shown in Fig. 1 as, e.g., reference numbers 120A and 120B. Finally, with regard to claim 25, Applicants note that this claim recites modules for detecting when a container is full in each of the recited positions and for detecting a position of the container. As explained above, the sensors participating in the fill capacity function are clearly shown in Fig. 1 as, e.g., reference numbers 120A-120C and the position sensors are clearly shown in Fig. 1 as, e.g., reference numbers 120D and 120E.

Examiner's Assertion

In the § 102(b) rejection, the Examiner asserts that LILLEY, and in particular Figs. 1-10 of LILLEY, discloses each of the features recited in claims 25 and 26.

Applicants' Response

Applicant disagrees. Independent claim 25 recites, *inter alia*, a module which detects when a container is full at a first tilt position, an intermediate tilt position and an upright position, a module which detects a position of the container, and a module which controls a movement of the container based at least on a capacity of the

container. LILLEY does not disclose anyone of these features. Instead, LILLEY teaches a material handler which has a container 3 that can be moved between three distinct positions (see col. 3, lines 19-22) and discloses the use of sensors 28 and 29 (see col. 3, lines 63-65). However, LILLEY clearly does not disclose a module which detects when a container is full at a first tilt position, an intermediate tilt position and an upright position. Furthermore, the Examiner has essentially acknowledged in the instant Office Action that LILLEY fails to disclose the features of claim 25. For example, in discussing the obviousness rejection on pages 3-5 of the Final Office Action, the Examiner acknowledges that LILLEY does not disclose a sensor that senses a fill capacity. On the other hand, claim 25 clearly recites a module which detects when a container is full at a first tilt position, an intermediate tilt position and an upright position. Accordingly, by the Examiner's own admission, this rejection is entirely improper. Still further, while the Examiner explains that the control unit 12 in LILLEY constitutes each of the recited modules, completely missing from such assertions is the identification of any language in LILLEY which discloses or suggests a module which detects when a container is full at a first tilt position, an intermediate tilt position and an upright position, and/or a module which detects a position of the container, and/or a module which controls a movement of the container based at least on a capacity of the container. Nor has the Examiner explained how the sensors 28 and 29 in LILLEY are capable of functioning as any of the recited modules, especially since these sensors are disclosed as merely functioning to disable "power to the system when an operator or equipment are in the area of the loading end of the container." See col. 3, lines 63-65. It is also clear that LILLEY fails to disclose a module which detects a position of the container. Again, a sensor "for disabling power to the system when an operator or equipment are in the area of the loading end of the container" is entirely different from a module which controls a movement of the container based at least on a capacity of the container. Finally, it is clear that LILLEY fails to disclose a module which controls a movement of the container based at least on a capacity of the container. Clearly, the disclosed sensors do not control the movement of the container based at least on a capacity of the container. The Examiner has simply failed to identify any language in LILLEY which discloses or suggests anyone of more of these features.

Examiner's Assertion

In rejecting claim 1, the Examiner acknowledges that LILLEY does not teach “a fill sensor to detect fill capacity”, but asserts that this is disclosed at col. 3, lines 35-38 and 52-56 of SMITH.

Applicants' Response

This is not correct. SMITH relates to an apparatus for filling storage boxes with lemons (see col. 1, lines 5-7), and not to an apparatus for loading mail objects. While it is apparent that SMITH discloses the use of a sensor to detect when a bin is filled, it is clear that the disclosed sensor does not detect whether a bucket assembly has reached a fill capacity, much less, at each of the upright position, the intermediate tilt position and the full tilt position. Instead, the sensor 40 “responds when the bin 28 is filled to a level which will completely fill one box.” See col. 3, lines 52-54. It is also clear that the disclosed sensor 40 does not detect when the container is full at the first tilt position, much less, when the container is full at the intermediate tilt position.

The Examiner is respectfully directed to col. 3, lines 52-68 of SMITH, which discloses the following:

In the apparatus 10 of the present invention, the photocell device 40 responds when the bin 28 is filled to a level which will completely fill one box. The filling of the bin to such level is indicated by the presence of one or more articles in the path of beam 42, for example, at the level of the top opening 26, whereupon the motor of the belt driving system 16 is de-energized to prevent overfilling. By this arrangement, the belt 14 carries articles toward the diverter bar 22 and the bin 28 only when there is room in the bin for more articles, and not when it is filled.

When the bin 26 is filled, the photocell device 40 actuates the solenoid valve 37, which in turn initiates the action of the pneumatic cylinder 32 to lower the chute 30 to its FIG. 4 position, whereupon articles flow out of the bottom opening 34 of the bin 28, through the chute 30 and into the box 36.

It is clear from such language that the sensor is used merely to indicate when the bin 26 is filled in order to ensure that the box is filled. Such language is hardly suggestive of detecting whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and the full tilt position, or of a feedback control system which controls an indexing of the bucket assembly, via the actuator system, between the upright position, the

intermediate tilt position and the full tilt position, or of detecting when the container is full at the first tilt position, much less, when the container is full at the intermediate tilt position.

Examiner's Assertion

In support of the obviousness rejection of claim 17, the Examiner essentially asserts that LILLEY discloses a positioning sensor at col. 5, lines 7-9 of LILLEY and that SMITH suggests modifying this sensor to be a fill sensor.

Applicants' Response

There is simply no language whatsoever in either LILLEY and SMITH which even remotely discloses or suggests at least one sensor which detects whether the bucket assembly has reached a fill capacity at each of the upright position, the intermediate tilt position and the full tilt position. Additionally, there is simply no language whatsoever in either LILLEY or SMITH which even remotely discloses or suggests a feedback control system which controls an indexing of the bucket assembly, via the actuator system, between the upright position, the intermediate tilt position and the full tilt position. Finally, there is no language whatsoever in either LILLEY and SMITH which discloses or suggests detecting when the container is full at the first tilt position, indexing the container to an intermediate tilt position to enable settling of contents within the container and detecting when the container is full at the intermediate tilt position.

CONCLUSION

Reconsideration of the Final Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Respectfully submitted,
W. BLACKWELL, et al.



Andrew M. Calderon
Reg. No. 38,093

December 13, 2005
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191